

ABSTRACT

A communications channel detector which determines the availability of a desired type of communications channel in a communication system having at least one communications channel, the communications channels including data streams comprising a number of data symbols. The channel detector includes a phase detector, a phase comparator coupled to the phase detector, and a phase correlator coupled to the phase comparator. The phase detector is configured to provide a plurality of phase measurements for at least two consecutive data symbols comprising a selected one of the communications channels. The phase comparator is configured to determine the phase differences between the obtained phase measurements. The phase correlator is configured to determine the whether or not the determined phase differences exhibit a predetermined phase difference profile.